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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,420	04/05/2005	Andrei Radulescu	NL03 0771 US	6715
24738 7590 02/20/2008 PHILIPS ELECTRONICS NORTH AMERICA CORPORATION INTELLECTUAL PROPERTY & STANDARDS 370 W. TRIMBLE ROAD MS 91/MG SAN JOSE, CA 95131			EXAMINER KIM, EDWARD J	
			ART UNIT 2155	PAPER NUMBER
			MAIL DATE 02/20/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/530,420

Applicant(s)

RADULESCU ET AL.

Examiner

EDWARD J. KIM

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 04/05/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is a responsive to the application filed on 04/05/2005.
2. Claims 1-7 are pending in this office action.
3. The claims are directed towards a network on an integrated circuit that maps a multicast address onto two or more further addresses, which identifies locations within second modules.

Priority

4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Inventorship

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Information Disclosure Statement

6. The information disclosure statement (IDS) submitted was filed on 04/05/2005. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

7. The disclosure is objected to because of the following informalities:

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The disclosure refers to claims in pg.1-2. Reference to claim numbers, in pg.1-2, are considered to be dynamic matter which can be altered during the examination process. In cases when amendments are made to the application, such as renumbering, cancellation of claims, or amendment of limitations, the reference to the claims maybe incorrect, inconsistent, resulting in an incomplete specification. Appropriate correction is required.

8. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.
9. The abstract of the disclosure is objected to because it does not commence on a separate sheet in accordance with 37 CFR 1.52 (b)(4) and does not meet the requirements of 37 CFR 1.72(b). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text. See MPEP § 608.01(b).
10. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.

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(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

(g) BRIEF SUMMARY OF THE INVENTION.

(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(i) DETAILED DESCRIPTION OF THE INVENTION.

(j) CLAIM OR CLAIMS (commencing on a separate sheet).

(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 112

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 1 and 7 recite "modules", which is not disclosed in detail, nor defined in the specification to enable one of ordinary skill in the art to make and/or use the invention. It is not disclosed whether the "modules" refer to software modules, such as data structures, or actual hardware components.

Claims 2-6 are dependent claims of claim 1, and therefore, rejected under the same basis as claim 1.

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Claim 6 recites, a “network interface”, which is not disclosed in detail, nor defined in the specification to enable one of ordinary skill in the art to make and/or use the invention. It is not disclosed whether the “network interface” is merely a software or a hardware component.

13. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

14. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 7 recite “modules”, which is vague and indefinite as to what the term is referring to. It is not sure whether the term is referring to a software or a hardware component, or how the term is defined. The metes and bounds of the limitation cannot be determined, failing to particularly point out and claim the subject matter which the Applicant regards as the invention.

Claims 2-6 are dependent claims of claim 1, and therefore, rejected under the same basis as claim 1.

Claim 6 recites a “network interface”, which is vague and indefinite to what the term is referring to, failing to particularly point out and claim the subject matter which the Applicant regards as the invention.

Claim Rejections - 35 USC § 101

15. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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16. Claims 1-6 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 1 recites, "Integrated circuit comprising a network and a plurality of modules, which are arranged to communicate to each other via the network...". Computer modules can be software per se, such as computer program modules or data structures. Since the term "modules" is not defined in the specification in detail, it can be interpreted as software per se.

Computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs are not physical "things". They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized.

M.P.E.P. 2601.1 Section I states, "Since a computer program is merely a set of instructions capable of being executed by a computer, the computer program itself is not a process and USPTO personnel should treat a claim for a computer program, without the computer-readable medium needed to realize the computer program's functionality, as nonstatutory functional descriptive material."

Claim 1 does not provide the computer-readable medium needed to realize the program's functionality. As such, claim 1 is not limited to statutory subject matter and is therefore non-statutory.

Claims 2-6 are dependent claims of claim 1, and therefore, rejected under the same basis as claim 1.

Claim Rejections - 35 USC § 102

17. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

18. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Davis et al. (US Patent #5,754,764), hereinafter referred to as Davis.

Regarding claim 1, Davis discloses, an integrated circuit comprising a network and a plurality of modules, which are arranged to communicate to each other via the network (Davis, Abstract, col.1 ln.58-61), wherein the network is arranged to establish transactions between a first module and at least two second modules (Davis, col.3 ln.22-45, col.15 ln.19-60, col.27 ln.38-40), characterized in that the network is arranged to replicate a single request from the first module into at least two replicated requests, and that the network is arranged to send the replicated requests to the second modules (Davis, col.27 ln.38-40, col.51 ln.22-42. It is inherent in multicasting that the message to be multicast are replicated accordingly.).

Regarding claim 2, Davis disclosed the limitations, as described in claim 1, and further discloses an integrated circuit, wherein the network comprises an address space and a facility for mapping at least one multicast address onto at least two further addresses in a range of addresses (Davis, col. 27 ln.38-40, col.51 ln.22-42, col.63 ln.27-46. Davis discloses an address translation table for mapping purposes.).

Regarding claim 3, Davis disclosed the limitations, as described in claim 2, and further discloses, an integrated circuit, wherein the network further comprises a facility for mapping at least one first multicast address onto at least one second multicast address, provided that the second multicast address is not mapped onto the first multicast address (Davis, col. 27 ln.38-40, col.51 ln.22-42, col.63 ln.27-46.).

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Regarding claim 4, Davis disclosed the limitations, as described in claim 2, and further discloses, an integrated circuit, wherein the network further comprises a facility for mapping a range of multicast addresses onto at least two ranges of further addresses (Davis, col. 27 ln.38-40, col.51 ln.22-42, col.63 ln.27-46.).

Regarding claim 5, Davis disclosed the limitations, as described in claim 1, and further discloses, an integrated circuit, wherein the single request comprises a connection identifier which identifies a multicast connection (Davis, col. 27 ln.38-40, col.51 ln.22-42, col.63 ln.27-46. Davis discloses that the multicast connection is identified via hashing.).

Regarding claim 6, Davis disclosed the limitations, as described in claim 1, and further discloses, an integrated circuit, wherein a network interface is arranged to perform the replication of the single request into the replicated requests, and wherein the network interface is arranged to send the replicated requests to the second modules (Davis, col. 27 ln.38-40, col.51 ln.22-42, col.63 ln.27-46.).

Regarding claim 7, Davis discloses, a method for sending requests in an integrated circuit comprising a network and a plurality of modules, which communicate to each other via the network (Davis, Abstract, col.1 ln.58-61), wherein the network establishes transactions between a first module and at least two second modules (Davis, col.3 ln.22-45, col.15 ln.19-60, col.27 ln.38-40), characterized in that the network replicates a single request from the first module into at least two replicated requests, and that the network sends the replicated requests to the second modules (Davis, col.27 ln.38-40, col.51 ln.22-42. It is inherent in multicasting that the message to be multicast are replicated accordingly.)

Conclusion

Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

The prior art made of record and not relied up on is considered pertinent to applicant's disclosure.

- Ramakrishnan, US Patent #6,167,029, System and Method for Integrated Data Flow Control.
- Beaudoin et al., US Patent #6,400,715 B1, Network Address Matching Circuit and Method.
- Szczepanek et al., US Publication #2003/0110344 A1, Communications System, Apparatus, and Methods, discloses an improved communications system with a circuit having a plurality of communication ports, which transfers data between first and second memory.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward J. Kim whose telephone number is (571) 270-3228. The examiner can normally be reached on Monday - Friday 7:30am - 5:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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